The Federal Department of Agriculture, naturally looked to as an agency for securing coordination of various efforts, has endeavored to unify the fruit and vegetable standardization work of the States (1) by recommending grade specifications for these products and (2) by making it easier for growers, shippers, and receivers to use these grades in a practical way by offering an inspection service. Upon application, disinterested inspectors will certify the compliance of individual carlots with the recommended grades.

Work Has Grown Rapidly

Begun in 1917 in receiving markets, this work grew so rapidly that by 1922 approximately 30,000 cars yearly were being inspected. But shippers were not satisfied to be told of their failures in grading after their products had reached the terminal markets. They demanded a similar service at shipping points, so that they might start their cars to destinations with evidence that they had complied with the quality specifications of their sales contract.

This extension of the service, granted by Congress in 1922, in cooperation with the States, has reached a point where 41 States cooperate with the department in a service which covers all the principal fruits and vegetables; 210,832 cars were certified at shipping

point in 1928.

This shipping-point service, while giving to its users the many immediate advantages which come from having official evidence of quality and condition of products which are particularly difficult to market because of their perishable nature, has exerted its greatest influence through the encouragement it has given to the more general use of uniform standards throughout the United States. service was begun, Federal grades were available only for potatoes, among the perishables. State grades for apples were in use in two or Federal grades have now been promulgated for 35 three States. fruits and vegetables, and it is estimated that two-thirds of our shipments of these products are now being marketed under well-recognized grades.

F. G. Robb.

for Canning Are Sold Increasingly by Grade

RUITS and Vegetables United States grades for fresh fruits and vegetables have long been recognized by growers, shippers, and buyers, but it was not until 1923 that the

Department of Agriculture undertook to formulate grades with definite specifications for fruits and vegetables used for commercial canning purposes. After three seasons' investigations, grades were recommended for cannery tomatoes. Since that time there has been increased interest on the part of both growers and canners in the idea of contracting on the basis of these grades and of having impartial inspectors determine the percentage of various grades in each load as it is delivered to the cannery.

Last season 15 canners of tomatoes contracted with their growers on the basis of the United States grades, and approximately 12,000 loads were inspected by licensed inspectors who determined the percentage of U. S. No. 1, U. S. No. 2, and cull tomatoes in the loads.

Canners paid a certain price for U. S. No. 2, a premium for U. S. No. 1, and nothing for cull tomatoes. Progressive growers of high-

quality tomatoes are recognizing the advantage of contracting with a canner on a basis which gives proper recognition to variations in quality. Canners are also finding that the system of buying on grades results in an improvement in the quality of pack of their tomatoes as well as in the amount packed out.

Growers and canners of apples and cabbage are also interested in United States grades for these commodities when used for canning

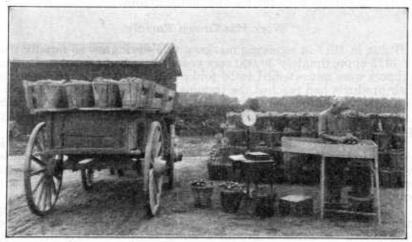


FIGURE 106.-Inspecting tomatoes at a cannery

purposes, and the department hopes to have investigations completed so that grades can be recommended for use in the 1929 season.

R. R. PAILTHORP.

Storage Diseases

RUIT Washes and Washing fruit as an adjunct to ordinary Their Relation to harvesting operations has developed from the necessity of removing spray residue from apples and pears in compliance with

pure-food laws in both the United States and foreign countries. After considering the capacity of any washing method to remove spray residue, the question most frequently asked is, What effect will it have upon the fruit, and especially upon its keeping quality? In order to obtain definite information of this character a large number of experiments and observations have been conducted at the United States

Fruit Disease Field Laboratory, Wenatchee, Wash.

It has been found that certain methods cause injury and an increased loss from storage rots, but it is now possible to point out the hazards involved in washing and, in most cases also, methods of avoiding them. Direct injury from chemical solvents is more frequently encountered on pears than on apples. This is largely due to the fact that pears are often picked immature when the lenticels are incapable of excluding chemical solutions. Pears are particularly susceptible to injury from the use of alkaline washes, which produce a blackening at the lenticels. Provided thorough rinsing is given, similar injury from hydrochloric acid washes does not ordinarily occur on pears unless the concentration is above 1 per cent (actual hydrochloric acid) and the exposure longer than three minutes.